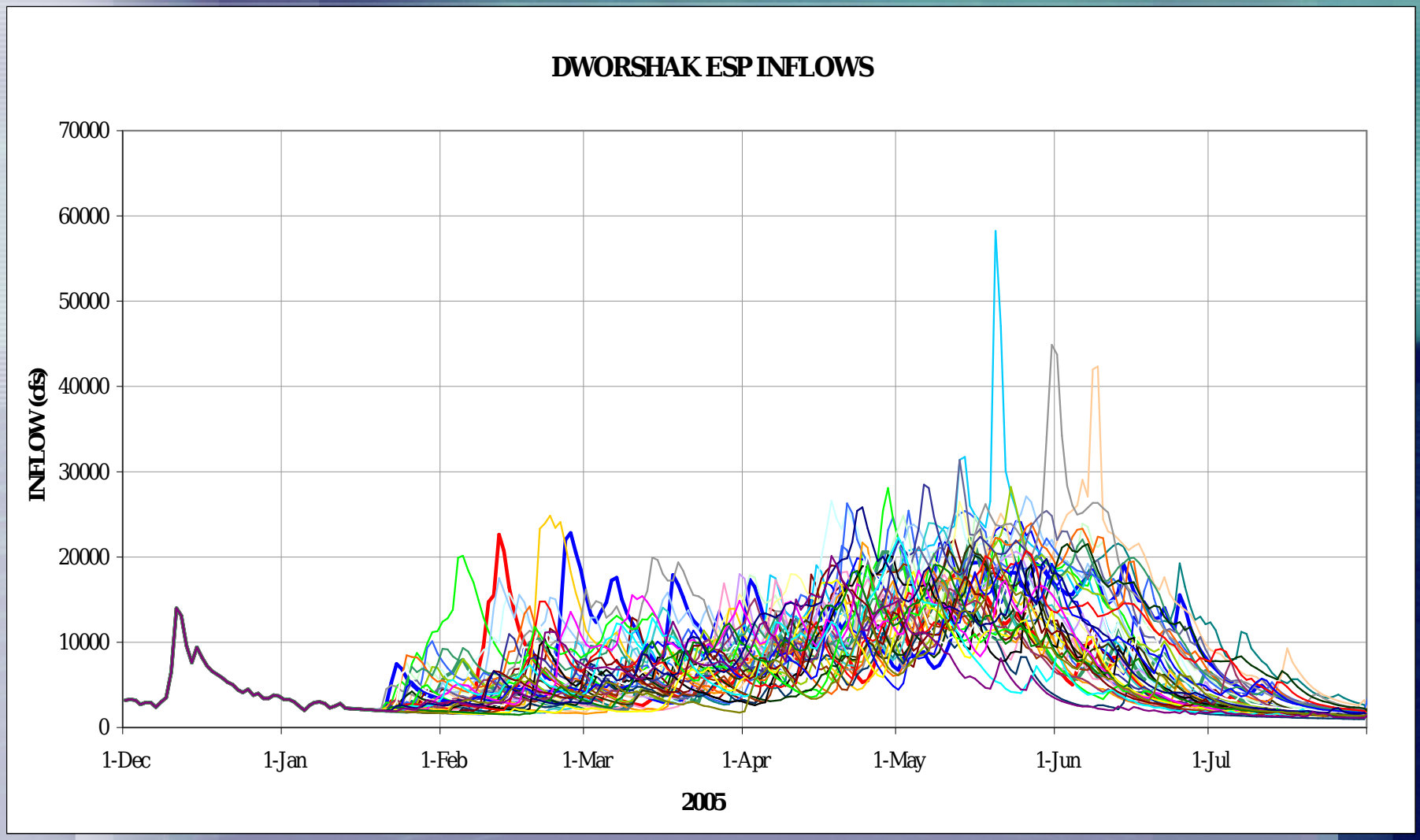
Dworshak Flexibility

Based on soil/snow conditions from 10 January 2005

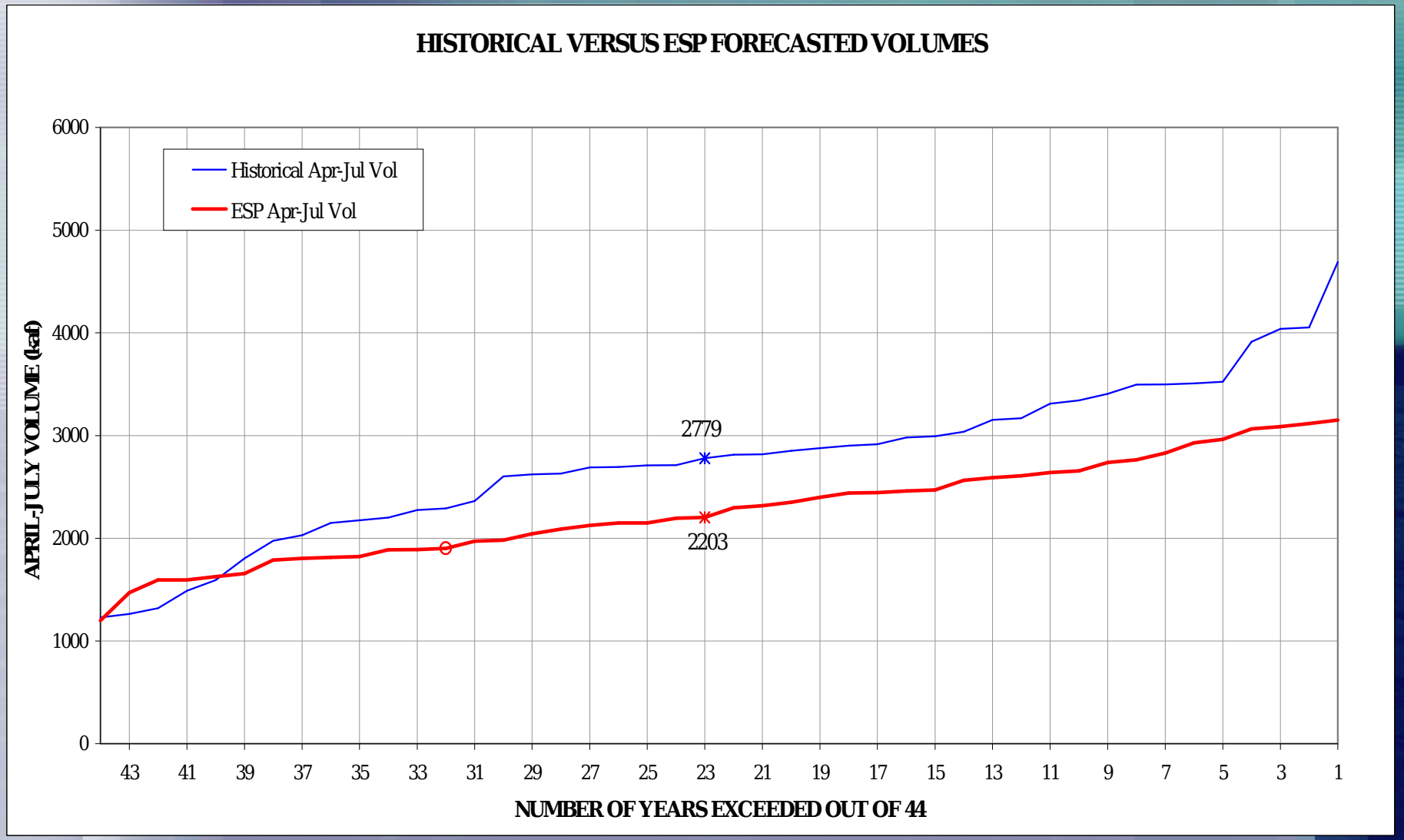
Purpose

- To utilize ESP to determine if additional releases were likely to be made from Dworshak Dam between January and March ’05
- To re-shape these releases when power demands are higher, i.e., cold periods, while refilling to the March 31 shifted flood control elevation

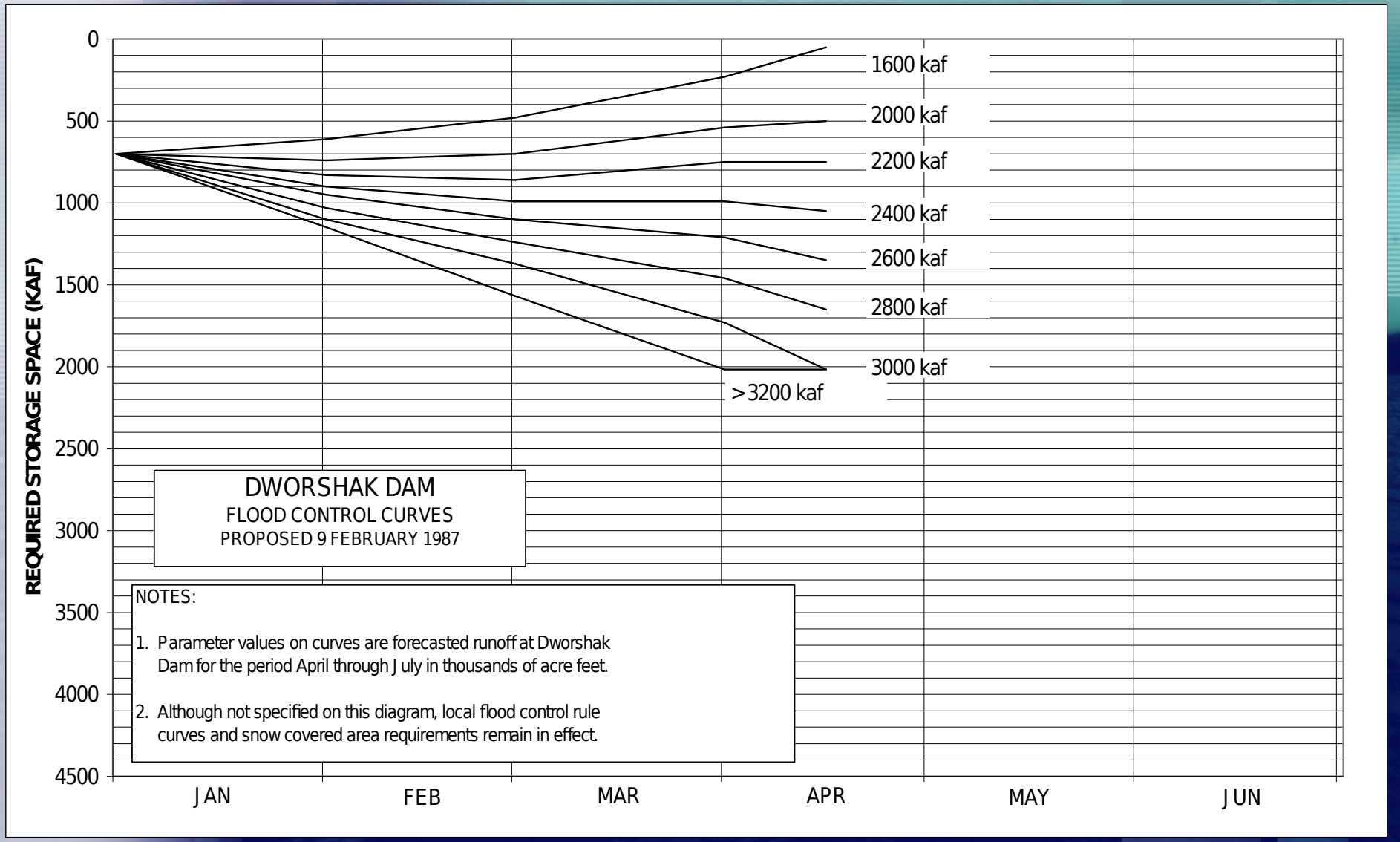
Inflows


DWORSHAK ESP INFLOWS
INFLOW (cfs)
70000
60000
50000
40000
30000
20000
10000
0
1-Dec
1-Jan
1-Feb
1-Mar
1-Apr
1-May
1-Jun
1-Jul
2005

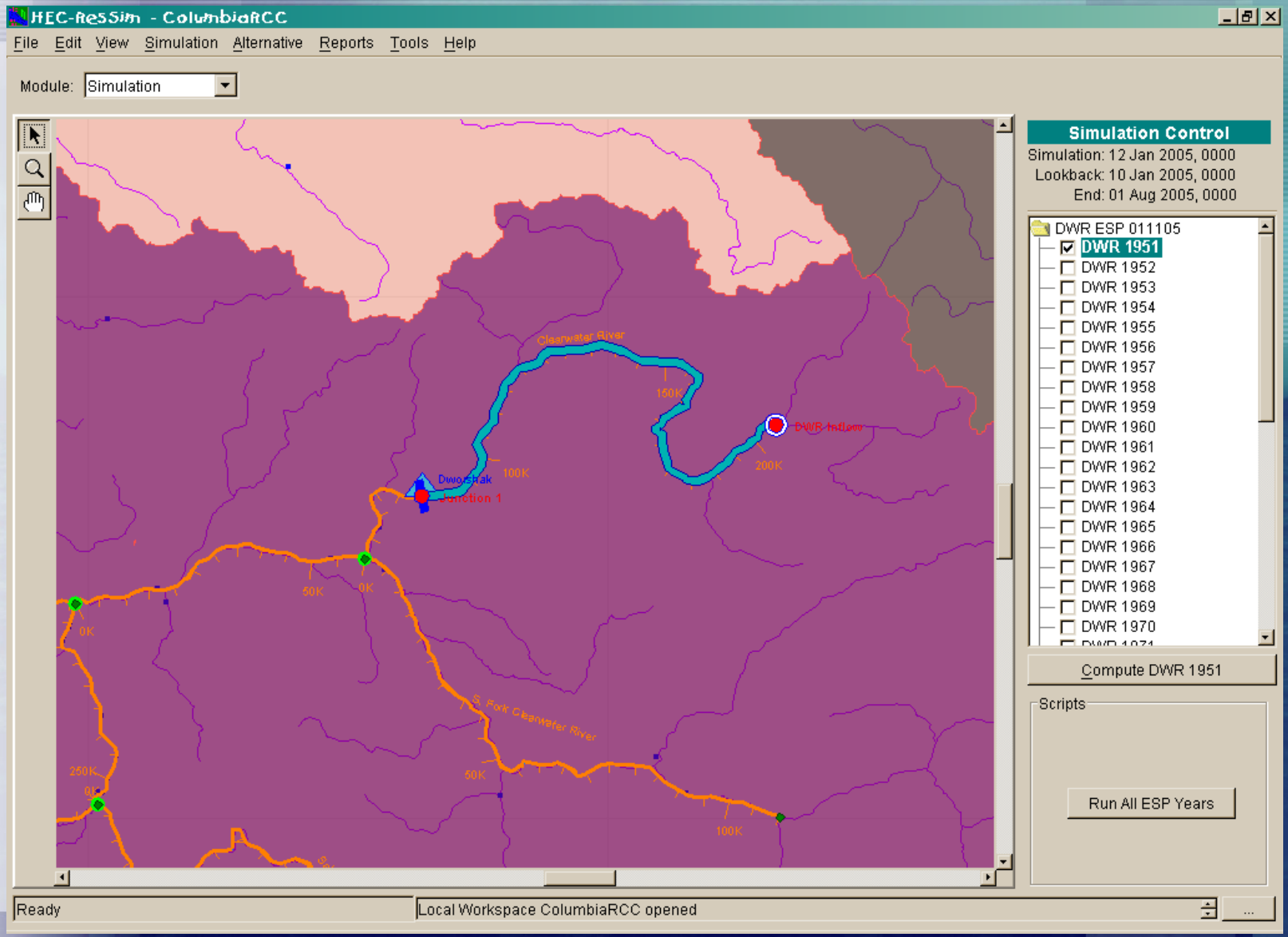
Volumes


HISTORICAL VERSUS ESP FORECASTED VOLUMES
Historical Apr-Jul Vol
ESP Apr-Jul Vol
APRIL-JULY VOLUME (kaf)
6000
5000
4000
3000
2000
1000
0
2779
2203
43
41
39
37
35
33
31
29
27
25
23
21
19
17
15
13
11
9
7
5
3
1
NUMBER OF YEARS EXCEEDED OUT OF 44

Flood Control Elevations

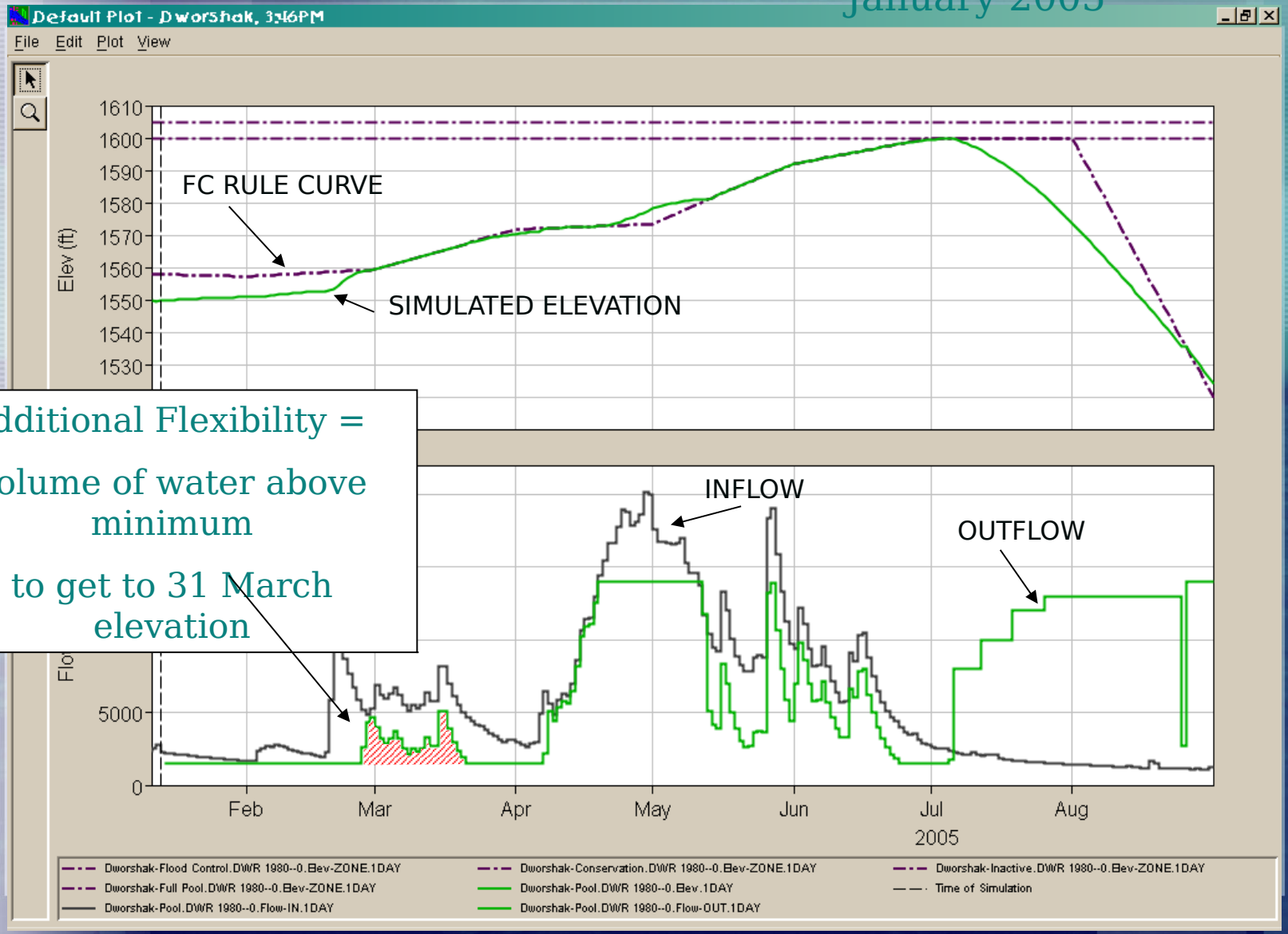


ResSim Model



Single Year Results

Temp/precip pattern from 1980 on initial soil/snow conditions from 10 January 2005

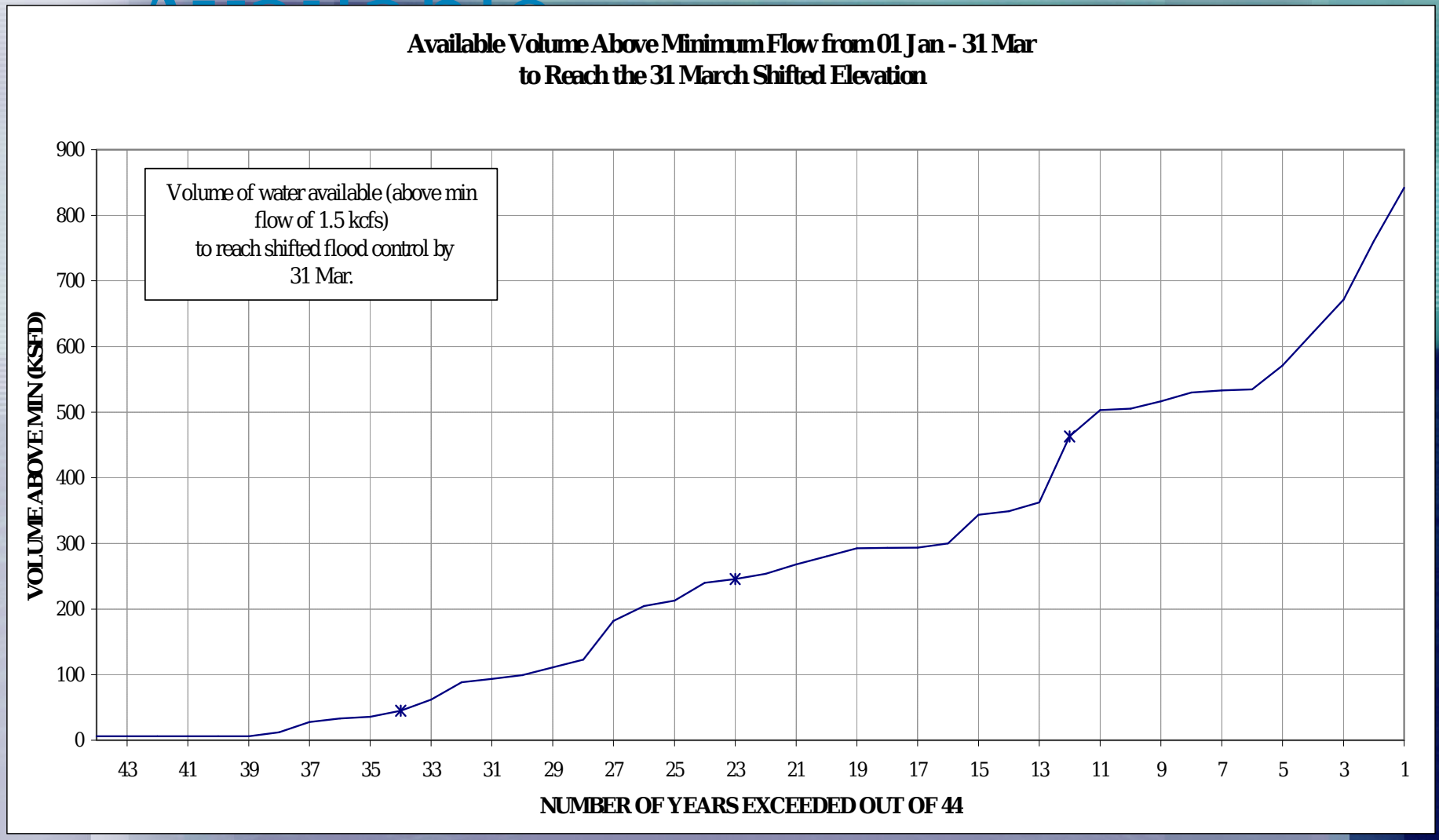


Additional Flexibility =

volume of water above minimum

to get to 31 March elevation

Additional Volume Available



Summary

- Goal is to provide flexibility while meeting the end of March shifted flood control elevations.
- Additional analyses will be done at least every other week to monitor changing conditions.